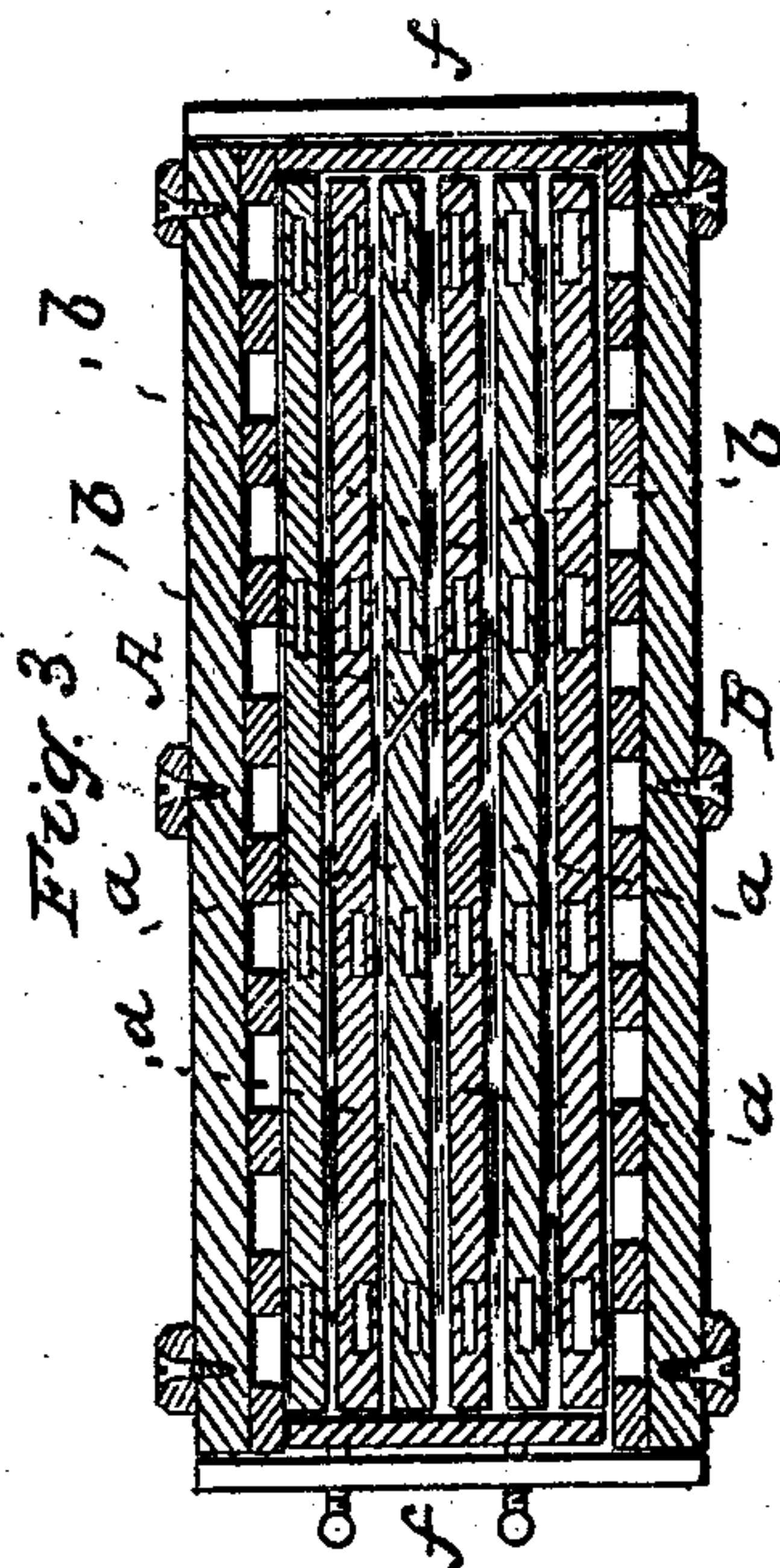
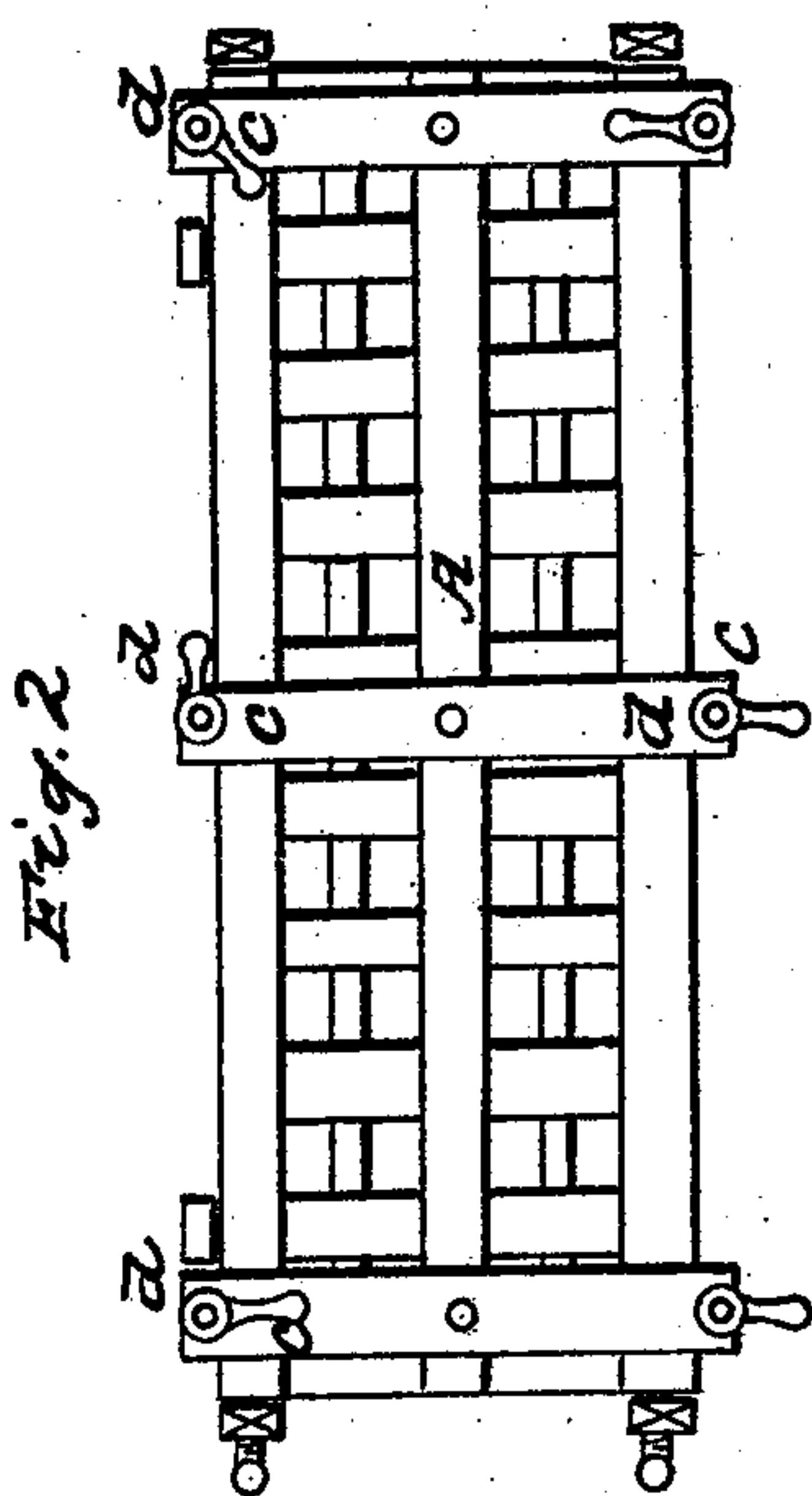
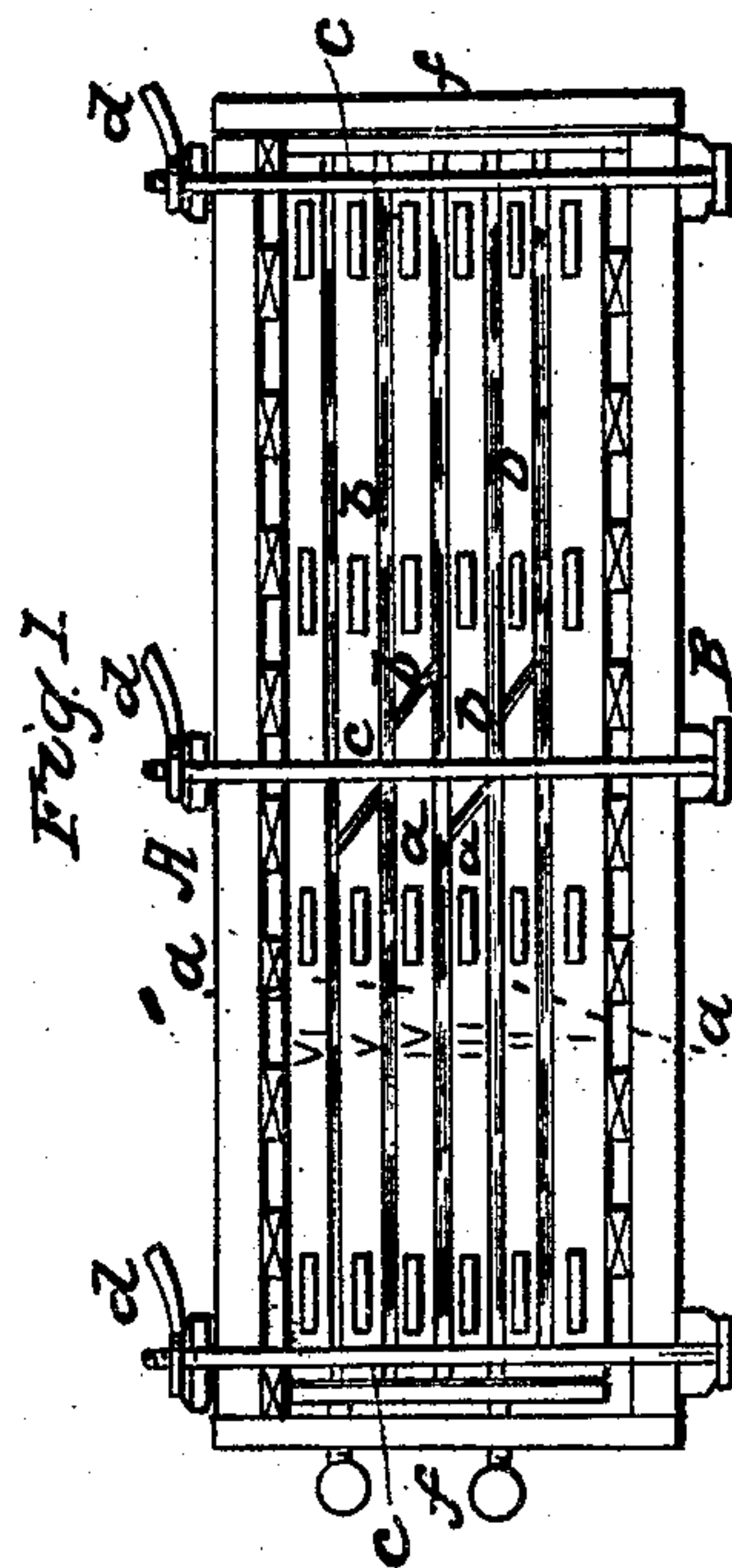
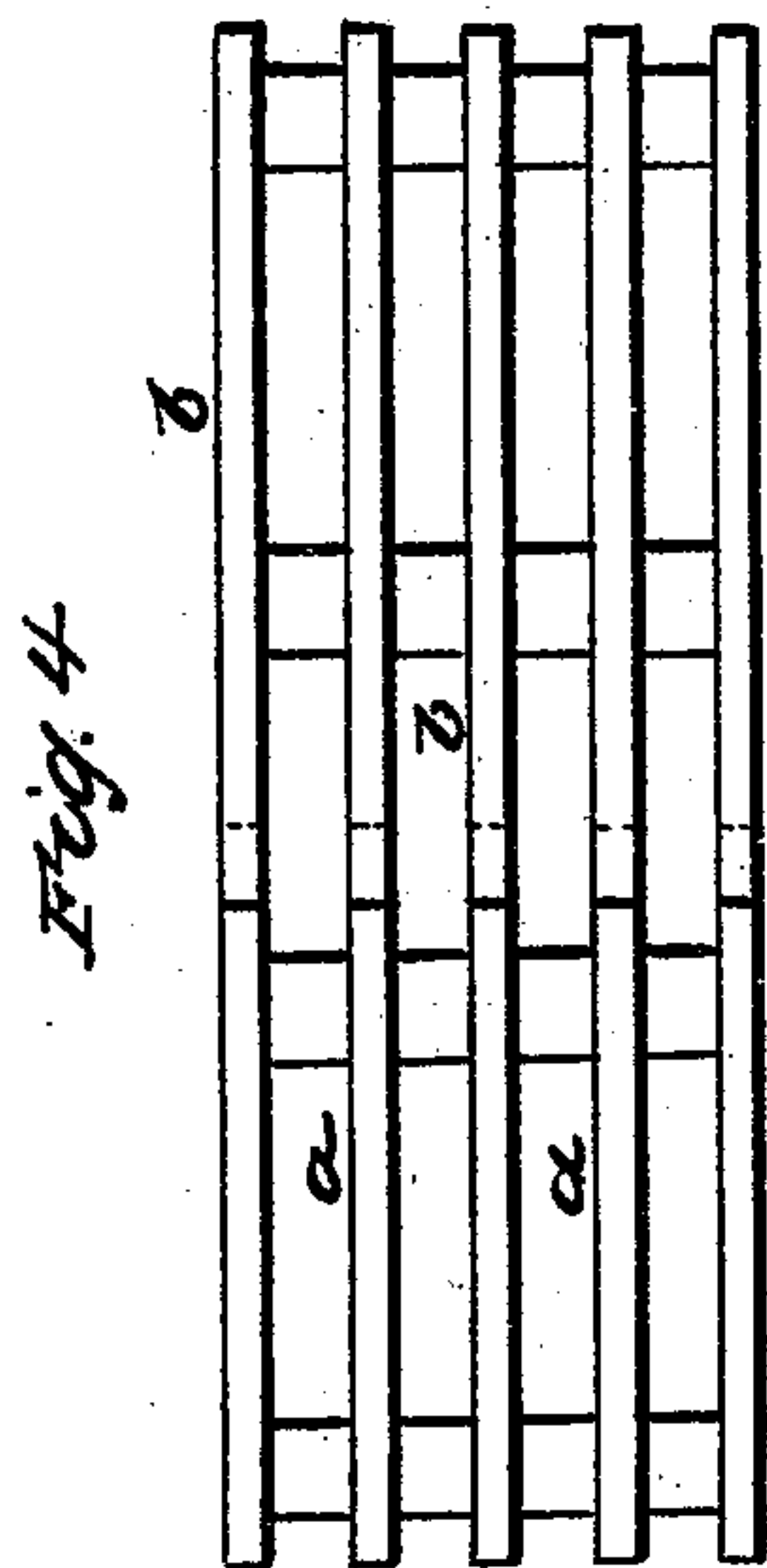


S. SMITH.  
Press for Dyeing.

No. 10,560.

Patented Feb. 21, 1854.





# UNITED STATES PATENT OFFICE.

SOLOMON SMITH, OF ACTON, MASSACHUSETTS, ASSIGNOR TO SMITH & SCHOALER.

## PARTICOLORING-MACHINE.

Specification of Letters Patent No. 10,560, dated February 21, 1854.

*To all whom it may concern:*

Be it known that I, SOLOMON SMITH, of Acton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Presses for Dyeing Goods or Fabrics in Stripes; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1, denotes a side elevation of one of my improved dyeing presses. Fig. 2, is a top view of it. Fig. 3, is a central, vertical and longitudinal section of it.

On the eleventh day of December, A. D. 1849, a patent was granted in the United States to Edward Brierley, for an improvement in apparatus for dyeing. The said apparatus was a dyeing frame so constructed as not only to contain the cloth, but when dipped into the coloring liquid, it prevented the said liquid from penetrating those portions of the cloth which it might not be desirable to have colored, and at the same time exposed to the coloring liquid the remainder of the cloth, or such portions as it was desirable to have colored. One if not the principal feature of novelty in this apparatus of the said Brierley consisted in the employment of vertical frames on or against the two ends of the pile of horizontal frames on the main dye frame, for the purpose of protecting from contact with the dyeing liquid, those parts of the cloth, which might be directly strained over against or on the ends of the horizontal strips of the main dye frame.

The object of my invention is to dispense with such end frames, and the mode of arranging the cloth around the ends of the strips of the dye frame.

In my improved dye frame, the cloth is arranged entirely within the frame and does not pass around or against its ends. For this purpose, I divide into two parts *a*, *b*, each of the wooden horizontal frames or layers for holding the cloth excepting that at the top and that at the bottom of the pile or those marked I, and VI, in Fig. 2. Where the two parts, *a*, and *b*, come together I make one lap by the other so as to enable the cloth to be passed between them.

A top view of two of the parts, *a*, *b*, is given in Fig. 4.

The cloth is laid between two of the layers in such manner as to enable it to be carried up between the two parts, *a*, *b*, of the next layer and so on from the lowest to the highest layer of the series, I, II, III, IV, V, VI. Thus it will be seen that the cloth is not carried around the outer ends of the layers or frames and therefore difficulties attendant on such an arrangement of it are obviated. The frames are confined to the cloth by pressure in one direction only, the frames for holding the cloth being arranged between the top and bottom press, frames A, B, which are drawn together by means of screw rods, *c*, *c*, *c*, and hand nuts, *d*, *d*, *d*, in the usual way. In Figs. 1 and 3, of the drawings, the cloth is represented by red lines.

The end boards, seen at *f*, *f*, are simply for gaging or guiding the frames or layers over one another.

My improvement has many advantages over the dye frame of the said Brierley. It enables the dye to obtain a better or free access to the exposed parts of the cloth and gets rid of the difficulties experienced when the cloth is carried around the outer ends of the different layers.

I therefore claim—

1. My improvement of dividing each of the horizontal layers or frames into two sections, *a*, *b*, and carrying the cloth from the lower to the upper sides of such sections between the contiguous inner ends of said sections. And in combination with the said mode of using sections and carrying the cloth between them.

2. I claim the improvement of making the end of one section lap by that of the other, so that the same contrivances used to compress the several frames, together or down upon one another may also operate to compress the two sections together and upon the cloth extending between them as specified.

In testimony whereof, I have hereto set my signature this thirty first day of May A. D. 1853.

SOLOMON SMITH.

Witnesses:

WINTHROP E. FAULKNER,  
W. S. RODIMON.